

Magnetrol Model J52 refrigerant level switches are float actuated units designed for use on liquids with 0.60 specific gravity and above. They utilize the Magnetrol magnetic principle to assure dependable performance.

## FEATURES

- \* Temperatures from: -45°C to +40°C (-50°F to +100°F).
- \* Maximum working pressure to 20.5 bar (300 PSIG).
- \* Housing is completely sealed against entrance of moisture, preventing internal frost formation.
- \* Conduit seal with 610 mm (24") lead wires prevents entrance of moisture laden air into the switch housing.
- \* Float chamber is a welded assembly fabricated from two low carbon steel sections.
- \* High and low level switch actuation is easily field adjustable between 13 mm (0.50") and 38 mm (1.50"), factory set for 38 mm (1.50").
- \* Vibration resistant switch mechanism has been specifically developed to provide reliable and troublefree operation.
- \* Housing cover seal of Viton A o-ring is used between housing cover and base to provide an air tight seal.
- \* Housing base can be rotated 360°.
- \* Dry contact switch mechanisms available for -30°C (-20°F) or for excessive vibration conditions.
- \* Baffle plate provided with the switch mechanism to prevent electrical wiring interference.
- \* Choice of enclosure:  
NEMA 4x, black steel cover  
NEMA 4, transparant Lexan® cover  
NEMA 4x/7/9, explosion proof.
- \* Used with most commercial refrigerants including Ammonia, Freon, Methyl, Chloride and Sulphur Dioxide.

## AGENCY APPROVALS

Agency	Model No.	Approval
CENELEC	J52-41X1-00X J52-41X2-00X®	EEx d II C T6
CSA	J52-41X1-00X J52-41X2-00X	Non-hazardous NEMA 4X
FM	J52-41XX-00X	Non-hazardous NEMA 4X
	J52-41XX-00X	Class I, Div. 1, Groups C & D Class II, Div. 1, Groups E, F & G

® Chamber assembly must be fitted with a CENELEC housing

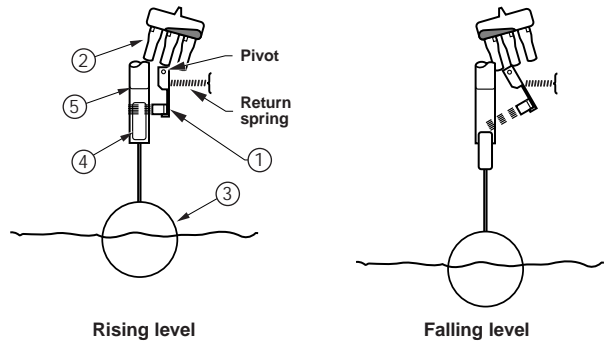
## Model J52 Refrigerant Level Switch



Lexan® is a registered trademark of General Electric

## PRINCIPLE OF OPERATION

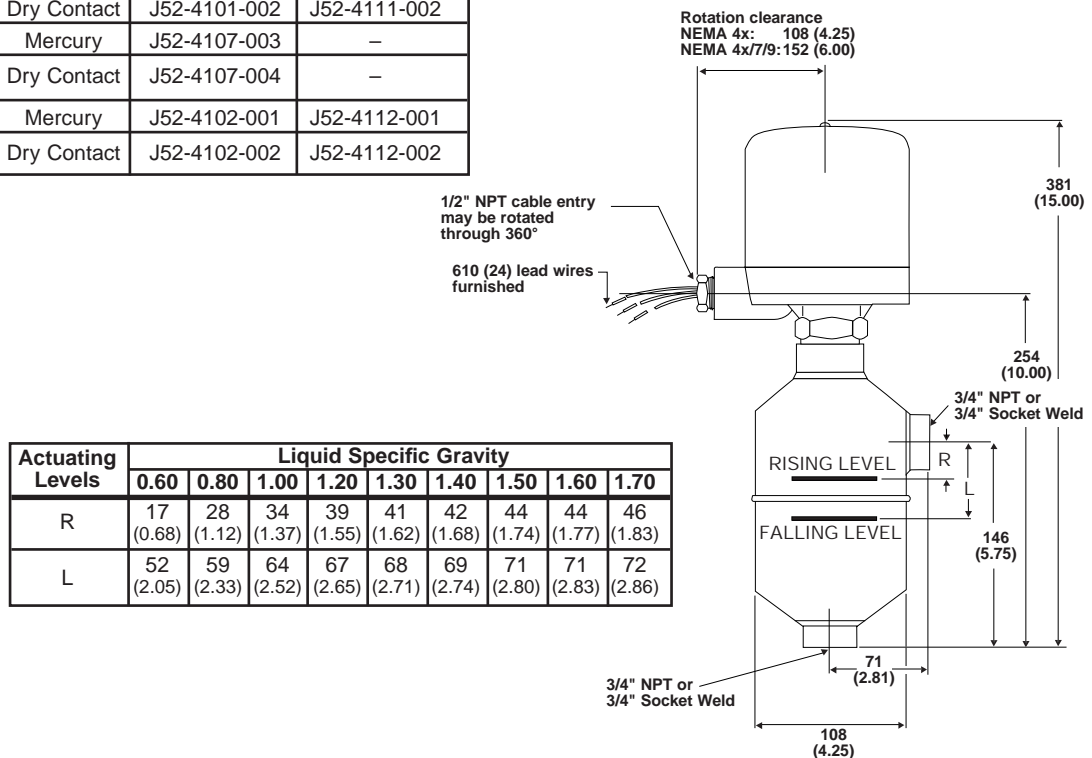
A permanent magnet ① is attached to a pivoted switch actuator ②. As the float ③ rises following the liquid level, it raises the attraction sleeve ④ into the field of the magnet, which in turn snaps against the non-magnetic enclosing tube ⑤ actuating the switch. The enclosing tube provides the static pressure boundary between the switch mechanism and the process.



## SELECTION DATA

Housing	Switch	Model Number	
		With 3/4" NPT Connection	With 3/4" Socket Weld Connection
NEMA 4x with Blk. Stl. Cover	Mercury	J52-4101-001	J52-4111-001
	Dry Contact	J52-4101-002	J52-4111-002
NEMA 4 with transparent Lexan® cover	Mercury	J52-4107-003	—
	Dry Contact	J52-4107-004	—
NEMA 4X/7/9 Explosion Proof	Mercury	J52-4102-001	J52-4112-001
	Dry Contact	J52-4102-002	J52-4112-002

## DIMENSIONS IN mm (inches)



Actuating Levels	Liquid Specific Gravity								
	0.60	0.80	1.00	1.20	1.30	1.40	1.50	1.60	1.70
R	17 (0.68)	28 (1.12)	34 (1.37)	39 (1.55)	41 (1.62)	42 (1.68)	44 (1.74)	44 (1.77)	46 (1.83)
L	52 (2.05)	59 (2.33)	64 (2.52)	67 (2.65)	68 (2.71)	69 (2.74)	71 (2.80)	71 (2.83)	72 (2.86)



### QUALITY ASSURANCE - ISO 9001

THE QUALITY ASSURANCE SYSTEM IN PLACE AT MAGNETROL GUARANTEES THE HIGHEST LEVEL OF QUALITY DURING THE DESIGN, THE CONSTRUCTION AND THE SERVICE OF CONTROLS. OUR QUALITY ASSURANCE SYSTEM IS APPROVED AND CERTIFIED TO ISO 9001 AND OUR TOTAL COMPANY IS COMMITTED TO PROVIDING FULL CUSTOMER SATISFACTION BOTH IN QUALITY PRODUCTS AND QUALITY SERVICE.

### PRODUCT WARRANTY

ALL MAGNETROL MECHANICAL LEVEL CONTROLS ARE WARRANTED FREE OF DEFECTS IN MATERIALS AND WORKMANSHIP FOR 5 FULL YEARS FROM THE DATE OF ORIGINAL FACTORY SHIPMENT.

IF RETURNED WITHIN THE WARRANTY PERIOD; AND, UPON FACTORY INSPECTION OF THE CONTROL, THE CAUSE OF THE CLAIM IS DETERMINED TO BE COVERED UNDER THE WARRANTY; THEN, MAGNETROL INTERNATIONAL WILL REPAIR OR REPLACE THE CONTROL AT NO COST TO THE PURCHASER (OR OWNER) OTHER THAN TRANSPORTATION.

MAGNETROL SHALL NOT BE LIABLE FOR MISAPPLICATION, LABOR CLAIMS, DIRECT OR CONSEQUENTIAL DAMAGE OR EXPENSE ARISING FROM THE INSTALLATION OR USE OF THE EQUIPMENT. THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED, EXCEPT, SPECIAL WRITTEN WARRANTIES COVERING SOME MAGNETROL PRODUCTS.



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UNDER RESERVE OF MODIFICATIONS

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